

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter.

1. (Currently amended) A method of diagnosing an aggressive form of cancer, the method comprising the steps of:

providing a genetic sample from a first tumor having less than about 3.5% invasive ability;

measuring *Wnt5a* expression in the first genetic sample;

providing a genetic sample from a test sample of a second tumor; and

measuring *Wnt5a* expression in the second genetic sample;

analyzing expression of *Wnt5a*, wherein increased expression of *Wnt5a* in the test sample of the second tumor compared to *Wnt5a* expression in a the first tumor having less than about 3.5% invasive ability indicates the second tumor is aggressive.

2.-3. (Canceled previously)

4. (Currently amended) A method of diagnosing an aggressive form of malignant melanoma, the method comprising the steps of:

measuring *Wnt5a* expression in a first tumor having non-detectable or no vasculogenic mimicry;

providing a genetic sample from a test sample of a second tumor;

determining expression of *Wnt5a* in the second tumor, wherein increased expression of *Wnt5a* in the test sample of the second tumor compared to *Wnt5a* expression in a the first tumor having non-detectable or no vasculogenic mimicry indicates the second tumor is aggressive; and

selecting a first treatment regimen for an individual with the second tumor if the second tumor is aggressive and a second treatment regimen if the second tumor is non-aggressive, wherein the first and second treatment regimens are not the same.

5-24. (Canceled previously)

25. (Previously presented) The method of claim 1, wherein the cancer is malignant melanoma.

26. (Newly added) A method of diagnosing an aggressive form of cancer, the method comprising the steps of:
- measuring *Wnt5a* expression in a first tumor having a cell motility of less than about 110.7 μm per day;
 - providing a genetic sample from a test sample of a second tumor; and
 - measuring *Wnt5a* expression in the second tumor;
- analyzing expression of *Wnt5a*, wherein increased expression of *Wnt5a* in the test sample of the second tumor compared to *Wnt5a* expression in the first tumor having a cell motility of less than about 110.7 μm per day indicates the second tumor is aggressive.
27. (Newly added) The method of claim 26, wherein the cancer is malignant melanoma.
28. (Newly added) A method of diagnosing an aggressive form of cancer, the method comprising the steps of:
- providing a genetic sample from a test sample of a tumor;
 - analyzing expression of *Wnt5a* in the test sample of the tumor compared to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased expression of *Wnt5a* in the test sample compared to a tumor in the gene expression profile having a particular phenotype indicates that the tumor of the test sample is aggressive.
29. (Newly added) The method of claim 28, wherein the cancer is malignant melanoma.
30. (Newly added) The method of claim 28, wherein the phenotype is chosen from at least one of: reduced cell motility, reduced invasive ability, and non-detectable or no vasculogenic mimicry.

31. (Newly added) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having less than about 3.5% invasive ability indicates the tumor of the test sample is aggressive.

32. (Newly added) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having non-detectable or no vasculogenic mimicry indicates the tumor of the test sample is aggressive.

33. (Newly added) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having a cell motility of less than about 110.7 μm per day indicates the tumor of the test sample is aggressive.